



Australian Bureau of Statistics

6224.0.55.001 - Labour Force, Australia: Labour Force Status and Other Characteristics of Families, June 2016

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Summary

In this issue

INTRODUCTION

This publication presents information about the labour force status and other characteristics of families from June 2012–June 2016. Information is also provided on the number and age of children in the family.

The information in this publication was collected as part of the monthly Labour Force Survey (LFS) that was conducted in June of each year. Family type has been derived from questions which establish the relationships between members of the households selected in the survey.

Relationship in household and families data are collected each month in the LFS and published in Labour Force Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) as estimates that relate to the number of persons. In contrast, estimates provided in this publication relate to the number of families rather than the number of persons. Estimates are also provided for the number of children aged 0–4 years, 5–9 years and 10–14 years in families. Children are normally outside of the scope of the labour force survey but are included in this publication because of the focus on the labour force status of families.

ROUNDING

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

INQUIRIES

For more information about ABS data available on request, contact National Information and Referral Service in Canberra on 1300 135 070 or via email to <client.services@abs.gov.au>. The ABS Privacy Policy outlines how the ABS handles any personal information that you provide to us.

What is a Family?

WHAT IS A FAMILY?

In this publication, a family is a group of two or more persons that are related by blood, marriage (registered or de facto), adoption, step or fostering, and who usually live together in the same household. This includes all families such as newlyweds without children, same-sex partners, couples with dependants, single mothers or fathers with children, and siblings living together. At least one person in the family has to be 15 years or over. A household may contain more than one family.

FAMILY COMPOSITION

There are three main types of families: couple families, one parent families, and other families.

- Couple families are based around a couple relationship between two persons who are either married or in a de facto partnership and usually resident in the same household. Couples can be same-sex or opposite-sex, and their dependants or children may also be members of the couple family if they all reside in the same household.
- One parent families are based around a person who is not in a couple relationship with anyone usually resident in the same household, but has at least one child usually resident in the household regardless of the age of the child. These households can include other related individuals. While couple families can be made up of couples with or without children - that is just two persons living together in a couple relationship, one parent families necessarily include children.
- Other families are based around family relationships that are neither couple relationships nor parent-child relationships, such as a brother and sister living together without any dependants.

In some cases, a household will contain more than one family. For example, a single mother with a baby living with her parents forms two families in the one household. The parents are one family and the daughter and her baby form another family.

WHAT IS NOT A FAMILY?

Divorced or separated parents who live alone and have children who usually live elsewhere are classified as a lone person household and not a family in the ABS definition. Even though a parent-child relationship exists - they might even have custody each weekend - if the child usually lives elsewhere, the people are not classified as a family according to ABS definitions. People who live by themselves in one house while their parents live in a different house are treated the same way. Even though they are **part** of a family, unless they live in the same household they don't **form** a family for the purpose of these statistics. This is to reflect the **usual living arrangements** of the household and ensure each person is only counted once.

Persons who aren't related or in a couple relationship and living in the same household, such as students sharing a flat, aren't considered to be a family unless one of the members of the household is under 15 years. In such cases, children under 15 years are considered to be dependent, so they form a child dependency relationship with the oldest member of a household (the family head), thereby forming a one parent family.

WHAT IS A DEPENDANT?

Families can be classed as having, or not having, dependants. There are two kinds of dependants: children under 15 years, and dependent students aged 15 to 24 years who are attending school or studying full-time at a tertiary education institution and living with their parents/guardians. These children are considered to be financially dependent on the parent or parents that they usually live with, which is why they are referred to as 'dependants'. However, they have to be usually living in the same household; full-time students who have left home to study and live by themselves are not considered to be part of the family in that household, even if they are financially dependent on their parents.

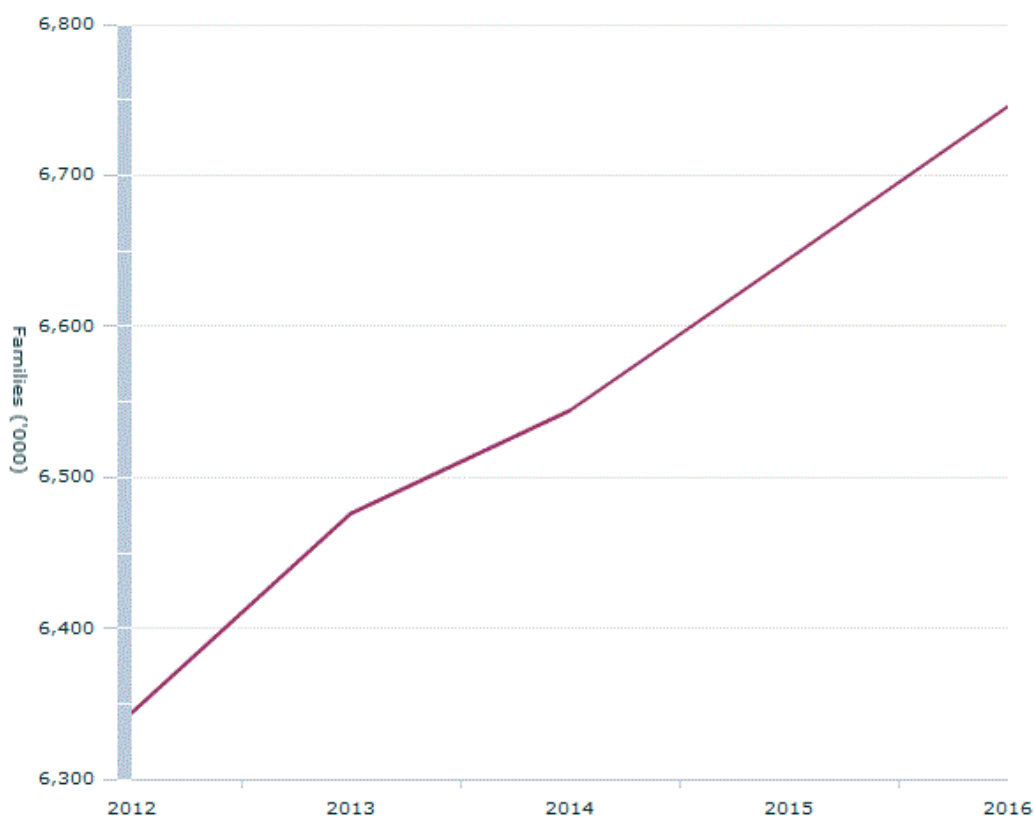
Children aged over 15 years who are not full-time students are, for the purposes of defining a family, not considered dependent on their parents, even if they still live at home. It is also possible to have one parent families without dependants, (for example, an 80 year old woman living with her 55 year old daughter).

It's important to consider whether children in a household are dependent on their parents when looking at these estimates, as the labour force characteristics will vary between families who have dependants and those that don't.

Australian Families

In June 2016, there were an estimated 6.7 million families living in Australia; this continued a steady increase of around 100,000 families per year from June 2012. The number of families with dependants (including children under 15 and dependent students aged 15–24 years) remained steady at 3.1 million, and the number of families with children under 15 years at 2.5 million. (**Datacube 1**)

NUMBER OF FAMILIES IN AUSTRALIA



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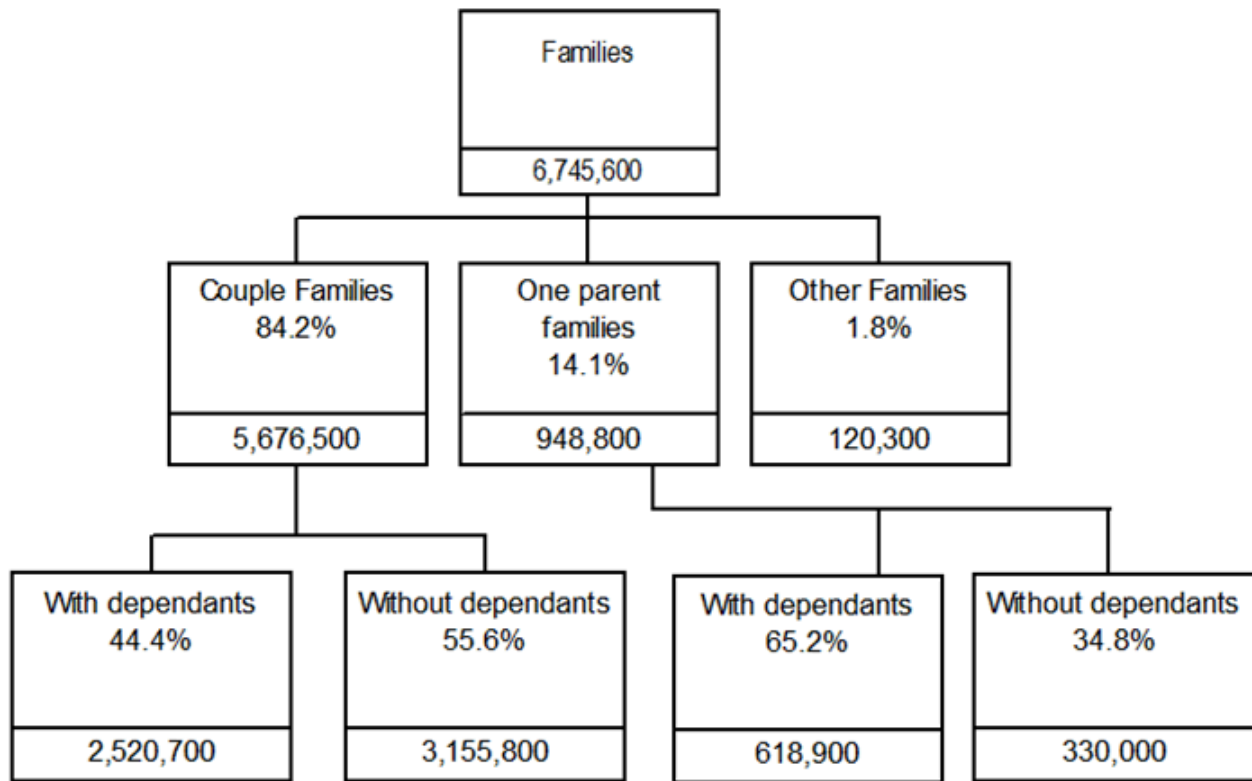
Source(s): NUMBER OF FAMILIES IN AUSTRALIA-6224_0_JUNE_2016_GRAPH_1

The vast majority of families were couple families (84%). Of the 5.7 million couple families, 2.5 million (44%) had dependants living with them in 2016.

The next largest group were one parent families (14%). Of the 948,800 one parent families, in 2016 almost two out of every three had dependants living with them (65%); 83% of these were headed by single mothers.

There were an estimated 120,300 other families in June 2016. Other families represented only 2% of all families living in Australia. (**Datacube 1**)

The following flow chart summarises this Australian Families structure.



Totals may not exactly match the sum of components due to rounding.

Couple Families

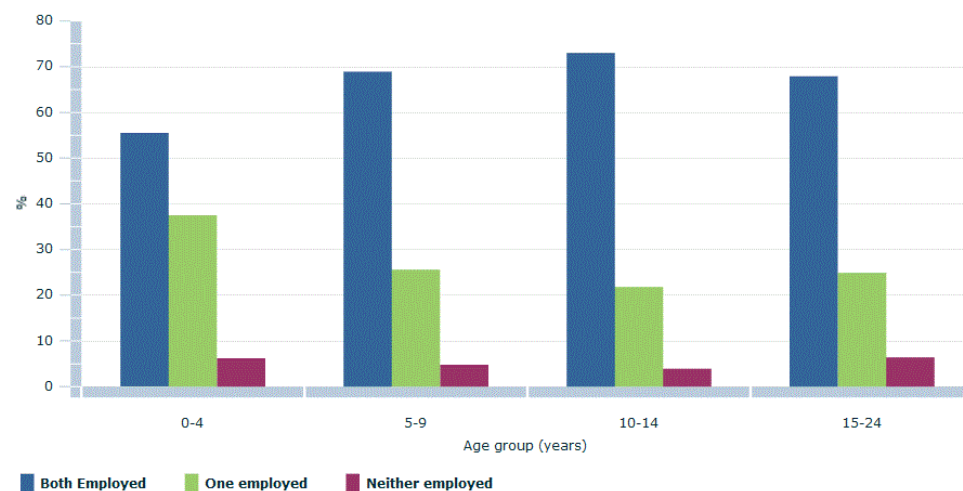
COUPLE FAMILIES

As noted in What is a Family?, couple families are based around a couple relationship between two people who are either married or in a de facto partnership and usually resident in the same household. It includes couples with or without dependants, and same-sex partners.

In June 2016, there were:

- 5.7 million total couple families (up from 5.5 million in 2015).
- 2.5 million opposite sex couple families with dependants (including children under 15 and dependent students aged 15–24 years) (representing little change from 2015).
- 3.2 million couple families without children under 15 or dependent students (up from 3.1 million in 2015).
- 52,400 same-sex couple families (up from 48,000 in 2015). (**Datacube 1**)
- 1.6 million couple families with children or dependent students where both parents were employed (representing little change from 2015). (**Datacube 9**)

TOTAL COUPLE FAMILIES, Employment status-By age of youngest dependent child, 2016



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Footnote(s): Does not include persons with undetermined labour force status

Source(s): [TOTAL COUPLE FAMILIES, Employment status-By age of youngest dependent child, 2016-6224_0_JUNE_2016_GRAPH_2](#)

Footnote(s): Does not include persons with undetermined labour force status

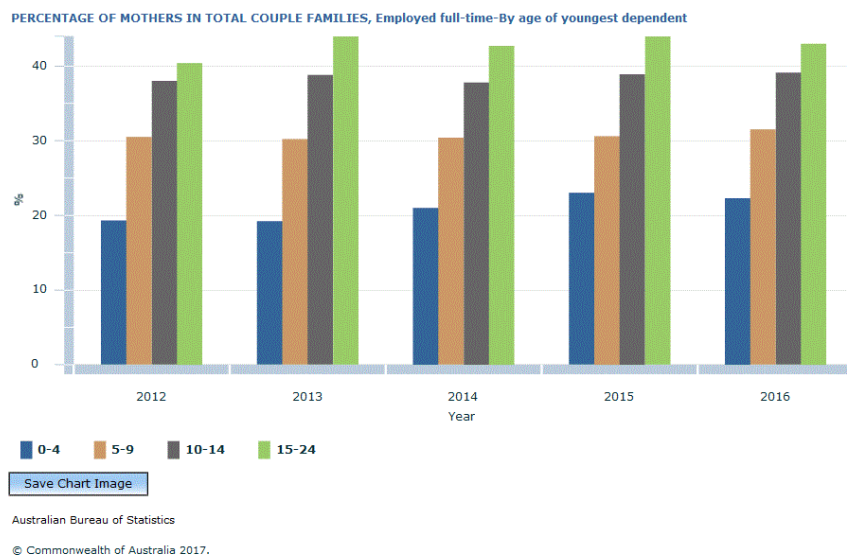
Source(s): TOTAL COUPLE FAMILIES, Employment status-By age of youngest dependent child, 2016-6224_0_JUNE_2016_GRAPH_2

TOTAL COUPLE FAMILIES WITH DEPENDANTS

The proportion of couple families with dependants in which one or both parents were employed was 94% in June 2016. The majority of couple families with dependants had both parents employed (64%), of which 1.3 million had at least one child aged less than 15 years. (**Datacubes 1, 3**)

There were 460,200 couple families which had a youngest dependent aged 15–24 years living with them; this represented 8% of all couple families. (**Datacube 8**)

In 2016, the wife/partner was employed in 69% of all couple families with dependants. As in previous years, the percentage of mothers employed full-time in couple families increased with the age of the youngest dependant, from 22% for mothers of 0–4 year olds to 43% of mothers of dependants aged 15–24 years. In 38% of couple families with dependants, the mother was employed part-time. This pattern has remained consistent from 2012-2016. (**Datacube 7**)



Source(s): [PERCENTAGE OF MOTHERS IN TOTAL COUPLE FAMILIES, Employed full-time-By age of youngest dependent-6224_0_JUNE_2016_GRAPH_3](#)

Source(s): PERCENTAGE OF MOTHERS IN TOTAL COUPLE FAMILIES, Employed full-time-By age of youngest dependent-6224_0_JUNE_2016_GRAPH_3

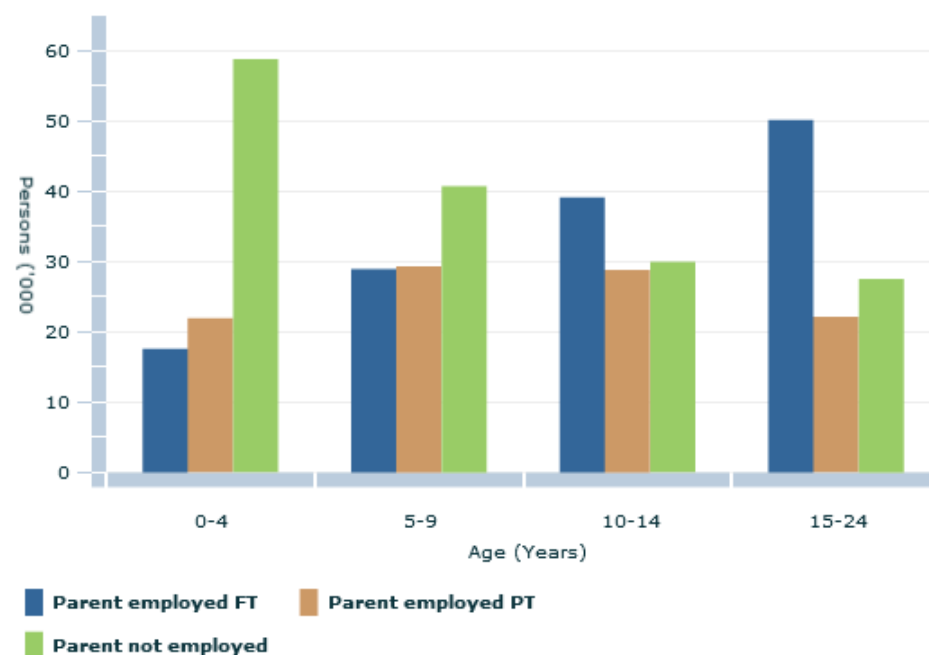
TOTAL COUPLE FAMILIES WITHOUT DEPENDANTS

In June 2016, 56% of couple families had no dependants. (**Datacubes 1,10**)

One Parent Families

In June 2016, there were 948,800 one parent families making up 14% of all families. Almost two-thirds of these one parent families (65%) had dependants living with them. (**Datacube 1**)

ONE PARENT FAMILIES, Employment status-By age group of youngest dependent



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Source(s): ONE PARENT FAMILIES, Employment status-By age group of youngest dependent child, 2016-6224_0_JUNE_2016_GRAPH_4

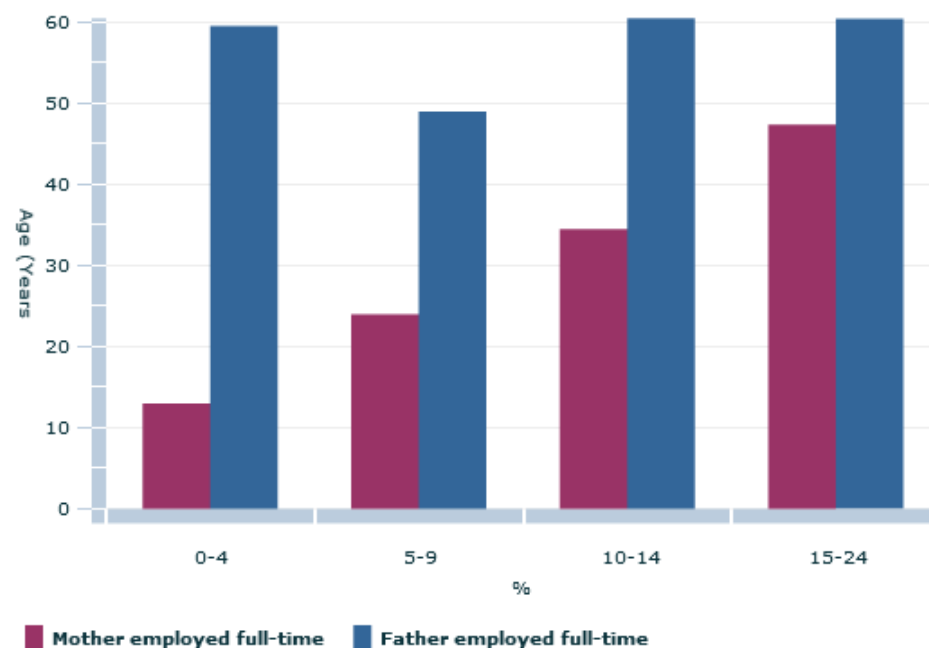
ONE PARENT FAMILIES WITH DEPENDANTS

In June 2016, there were 618,900 one parent families with dependants (including children under 15 and dependent students aged 15–24 years); the vast majority (83%) were single mother families. Of all one parent families with children and dependants, 53% had a youngest dependant aged 0–9 years. **(Datacube 1, 9)**

There were 363,200 one parent families where the parent was employed and had dependants in June 2016; this represented 59% of all one parent families with dependants. Of these families 287,700 had an employed single mother and 75,500 had an employed single father. In one parent families with dependants, 56% of mothers were employed, compared with 72% of fathers. **(Datacube 9)** Over three-quarters (76%) of employed single mothers were aged between 35 and 54 years. **(Datacube 7)**

Overall the proportion of one parent families with children or dependants aged 15-24 years where the parent was employed generally increased with the age of the youngest dependant, from 40% (youngest dependant under 5 years old) to 72% (youngest dependant 15–24 years old). However, this increase was more prominent for single mothers. **(Datacube 9)**

ONE PARENT FAMILIES, Employment status-By sex & age of youngest dependent



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Source(s): ONE PARENT FAMILIES, Employment status-By sex and age of youngest dependent child, 2016-6224_0_JUNE_2016_GRAPH_5

Jobless Families

JOBLESS FAMILIES

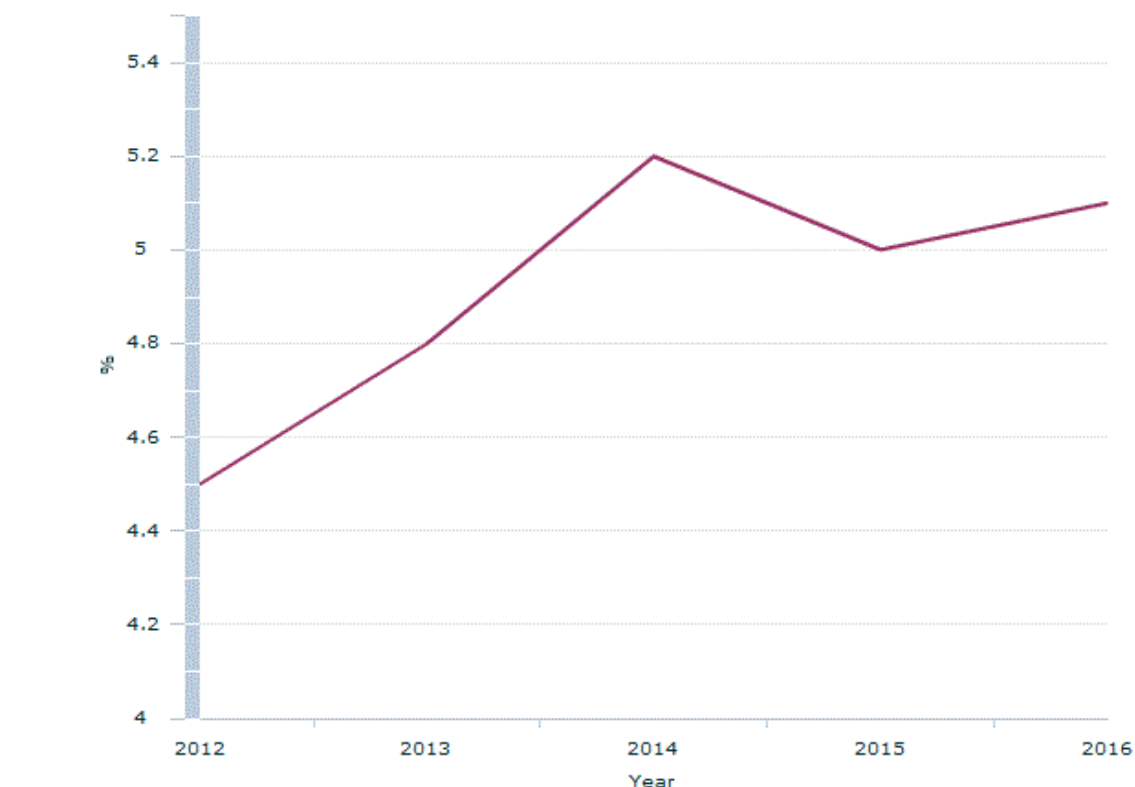
A jobless family is a family where no persons in the family aged 15 years and over are employed (this includes dependent students aged 15–24 years). In a jobless family, all of the family members are either unemployed and/or not in the labour force. Families that have no employed members but do have members that are "not determined in the scope of the labour force survey," such as having a family member who is a member of the permanent Australian defence force, are not included in the number of jobless families, however they are included in the total number of families.

In June 2016, there were 1.4 million jobless families, representing 22% of all families. Of these, around 1.1 million were jobless families without dependants and 341,500 had dependants (around 11% of all families with dependants). The proportion of jobless families with dependants has remained stable in recent years. (**Datacubes 1, 4**)

COUPLE FAMILIES WITH DEPENDANTS

In June 2016, 127,600 couple families with dependants (including children under 15 and dependent students aged 15–24 years) were jobless. Of these, 112,300 (88%) had children under 15, which equated to there being an estimated 220,600 children aged 0–14 years in jobless couple families; this represented an increase from 217,100 in 2015. (**Datacube 4**)

JOBLESS COUPLE FAMILIES, With dependants-As percentage of all couple families with dependants



Year

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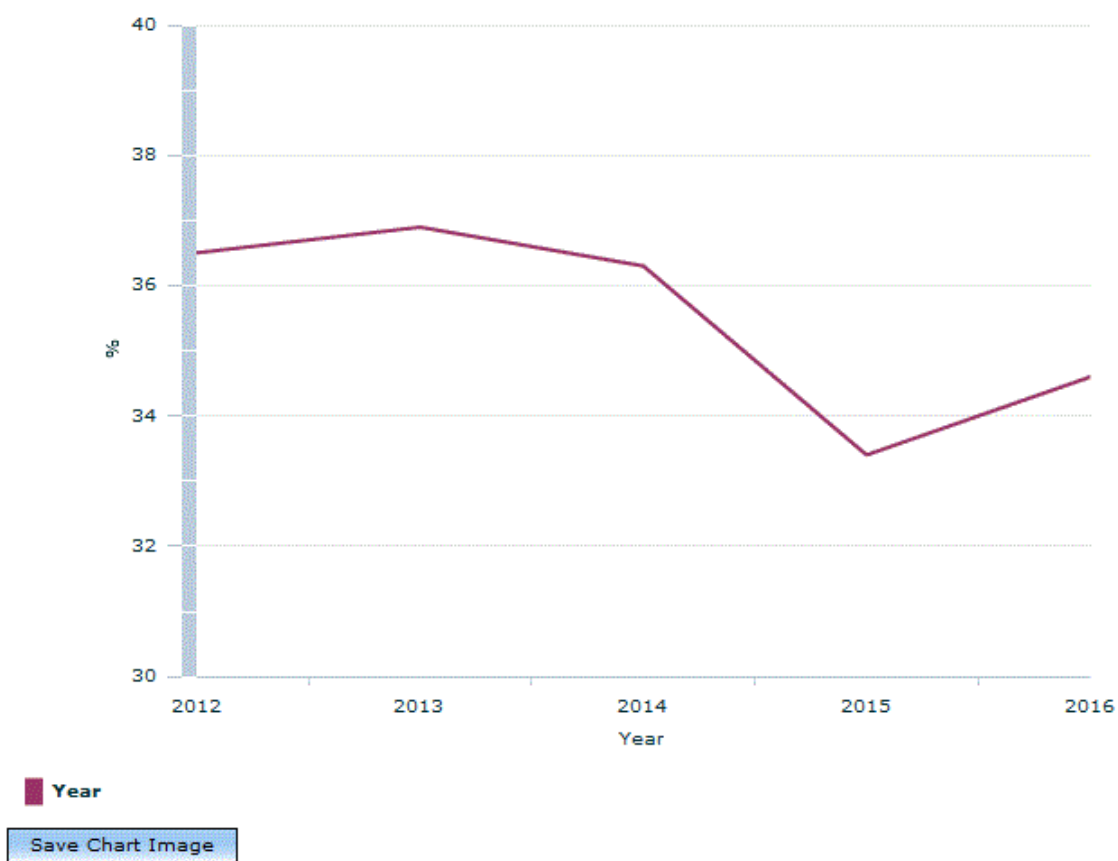
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Source(s): JOBLESS COUPLE FAMILIES, With dependants-As percentage of all couple families with dependants-6224_0_JUNE_2016_GRAPH_6

ONE PARENT FAMILIES WITH DEPENDANTS

In June 2016, there were 213,900 jobless one parent families with dependants (over one third (35%) of all one parent families with dependants). Of these, 193,600 (91%) had children under 15, which equated to an estimated 359,600 children aged 0-14 years in these families. (**Datacubes 1, 4**)

JOBLESS ONE PARENT FAMILIES, With dependants-As percentage of all one parent families with dependants



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Source(s): JOBLESS ONE PARENT FAMILIES, With dependants-As percentage of all one parent families with dependants-6224_0_JUNE_2016_GRAPH_7

NUMBER OF CHILDREN, Aged 0-14 years-In jobless families



Source(s): NUMBER OF CHILDREN, Aged 0-14 years-In jobless families-6224_0_JUNE_2016_GRAPH_8

JOBLESS FAMILIES WITHOUT DEPENDANTS

In 2016, there were 1.1 million jobless families without dependants, which represented 31% of all families without dependants. Of all jobless families without dependants, 1 million (92%) were couple families, while 90,500 (8%) were one parent families. (**Datacubes 1, 4**)

Dependants aged 15-24 years

DEPENDANTS AGED 15-24 YEARS

A child aged 15-24 years is a dependant if they are still attending school or attending a tertiary institution full-time. However, they cannot be a dependant if they have a partner or child of their own usually resident in the household.

In 2016, there were 1.4 million dependent students aged 15-24 years attending school or studying full-time at a tertiary education institution and usually resident in the same household as their parents/guardian. This number has remained steady over recent years. (**Datacube 5**)

Of all families with children and dependants, 19% had a youngest dependant aged between 15-24 years in 2016. In 2016, 77% of families with youngest dependants aged 15-24 years were couple families. (**Datacube 9**)

About this Release

The Labour Force Status and other Characteristics of Families publication provides information on family dynamics including the number and age of children in the household. The data are compiled using original data collected in the June month of the Labour Force Survey.

History of Changes

This document was added or updated on 25/01/2017.

25/01/2017 - The graphs have been republished to ensure readability on mobile devices. No other changes have been made.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 This publication, Labour Force Status and Other Characteristics of Families (cat. no. 6224.0.55.001), is produced from data collected in the Labour Force Survey (LFS) in June 2012–2016. It includes detailed family data not featured in the monthly Labour Force, Australia (cat. no. 6202.0) or Labour Force Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) publications.

2 Since these products are all based on data collected in the LFS, the explanatory notes of publication Labour Force, Australia (cat. no. 6202.0) are relevant to all three publications. Additional information is provided in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).

SCOPE

3 Family data was collected for persons aged 15 years and over who were usual residents of private dwellings and whose family status could be derived. It includes information on family relationships including age of children.

4 Persons interviewed in the LFS who were classed as visitors to private dwellings, and those living in non-private dwellings (including hotels, motels, hospitals and other institutions) were also excluded. After these exclusions are applied, the estimates in this publication for 2016 cover approximately 84% of the survey sample.

5 From October 2008, the method of producing family estimates from the LFS was improved to include the following:

- an expanded scope to include households containing permanent members of the Australian defence forces that are usually excluded from labour force estimates;
- an increased range of families in the LFS sample contributing to the family estimates; and
- improvements to the weighting method by utilising independent population benchmarks (of persons and households), ensuring the estimates more closely reflect the Australian population.

6 For more information, see the Information Paper: Improvements to Family Estimates from the Labour

DATA INTERPRETABILITY

7 The data contained in the additional tables contains cells with estimates with an RSE of greater than 50 percent and these are considered to be unreliable for general use, combined with estimates with an RSE of between 25 percent and 50 percent should be used with caution. The data used to compile families statistics contain complex family relationships which can add to the complexity of the aggregated estimates. The data in these tables are as reported by any responsible adult aged 15 years and over who were usual residents of private dwellings and were selected in the LFS.

BENCHMARKING AND ESTIMATION

8 The LFS and Labour Force, Australia: Labour Force Status and Other Characteristics of Families (cat. no. 6224.0.55.001) estimates are calculated in such a way as to sum to the independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are updated quarterly based on Estimated Resident Population (ERP) data. Generally, revisions are made to population benchmarks for the LFS following the final rebasing of population estimates to the latest five-yearly Census of Population and Housing, or when the need arises.

9 For all years in this release, estimates have been compiled using population benchmarks based on the results of the 2011 Census. These benchmarks have been revised to include the ERP data as at May 2016. For more details on population benchmarks, see the Explanatory Notes in Labour Force, Australia (cat. no. 6202.0).

COMPARABILITY WITH PREVIOUS ESTIMATES

10 Care should be taken when comparing the estimates of previous years estimates with the current year as data has not be recompiled using latest population estimates.

CHANGES IN THIS ISSUE

11 The ABS has revised Datacube 7 - Families with children or dependants by labour force status and age of mother and age of youngest child - June 2012–2016 data due to a correction in population scope. This revision has also been reissued in the 2015 publication.

12 An additional Datacube (Datacube 10 - Families without children or dependants by labour force status and age of wives/partners and age of youngest child - June 2012–2016) has been created to account for the change to Datacube 7. This additional datacube has also been included in the 2015 publication.

ACKNOWLEDGEMENT

13 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the Census and Statistics Act, 1905.

RELATED PUBLICATIONS

14 ABS publications which may also be of interest include:

- Labour Force, Australia (cat. no. 6202.0);
- Labour Force Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001)
- Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001)
- Labour Force Survey Standard Products and Data Item Guide (cat. no. 6103.0)

Glossary

GLOSSARY

This publication, Labour Force Status and Other Characteristics of Families (cat. no. 6224.0.55.001) is produced from data collected in the June Labour Force Survey (LFS) for a particular year. It includes detailed family data not featured in the monthly Labour Force, Australia (cat. no. 6202.0) or Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) publications.

Since these products are all based on data collected in the LFS, the Glossary of publication Labour Force, Australia (cat. no. 6202.0) and information is provided in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001), may be of assistance.

The following glossary items are provided as they relate specifically to family characteristics.

Child

A person of any age who is a natural, adopted, step, or foster son or daughter of a couple or lone parent, usually resident in the same household. A child is also any individual under 15 years, usually resident in the household, who forms a parent-child relationship with another member of the household. This includes otherwise related children under 15 years and unrelated children under 15 years.

In order to be classified as a child, the person can have no partner or child of his or her own usually resident in the household.

There are three types of child identified in the 'Relationship in household' classification:

- Child under 15 years
- Dependent student
- Non-dependent child

The differentiation of children into these three types is based upon the dependency criterion and is designed to identify families with different structures and needs. Dependency as used in these standards refers to economic dependency and is applied only to the population of people who could be described as 'children'. It is thus not intended to measure an aged or disabled person's dependency.

See Dependant, Dependent Student and Non-dependent Child.

Couple Relationship

A couple relationship is defined as two people usually residing in the same household who share a social, economic and emotional bond usually associated with marriage and who consider their relationship to be a marriage or marriage-like union. This relationship is identified by the presence of a registered marriage or de facto marriage.

A 'couple relationship' includes same-sex couples.

Dependant

A dependant is a family member who is either:

- under 15 years of age;
- aged 15–19 years and attending school or aged 15–24 years and attending a tertiary education institution full time (i.e. dependent students).

In order to be classified as a dependant, the person must have no partner or child of his/her own usually resident in the household. A separate family in the household is formed in this instance.

Dependent Student

A full time student aged 15-24 years, living in the same usual residence as his or her natural, step, foster or adoptive parent.

Family

Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

Consider, for example, if two elderly brothers are living with the family of the daughter of one of the brothers. The daughter's family forms the basic family of the household and the two brothers are both allocated to this family unit as related individuals. The two brothers do not form a separate family in their own right in addition to the daughter's family, because they are related to a couple family or one-parent family already present in the household. However, if the two brothers were living in a dwelling with a family to whom they were not related, they would then form a family in their own right and be classified as an 'other family'.

See Other Families'.

Family Composition

The categories for family composition are:

- Couple family
 - Couple family with dependants
 - Couple family with children under 15 years
 - Couple family without children under 15 years, but with dependent students
 - Couple family without dependants
 - Couple family without dependants, but with children 15 years or older (ie non-dependent child)
 - Couple family without children
- One parent family
 - One parent family with dependants
 - One parent family with children under 15 years
 - One parent family without children under 15 years, but with dependent students
 - One parent family without dependants, but with children 15 years or older (ie non-dependent child)
- Other families

Father

The male parent with dependants and/or children. The relationship between a father and a child/dependant can be formed via a natural, adoptive, step, foster or child dependency relationship.

Household

One or more persons usually resident in the same private dwelling.

Husband/Partner

A person in a couple relationship with another person usually resident in the same household. The couple relationship may be in either a registered or de facto marriage and includes same-sex couples.

Jobless Family

A jobless family is a family where no persons in the family aged 15 years or over are employed. This includes dependants.

In a jobless family, all of the family members are either unemployed and/or not in the labour force.

Families that have no employed members but do have members that are classified as undetermined in the scope of the labour force survey, such as members of the permanent Australian defence force, are not included in the number of jobless families.

Lone Parent family

See One Parent family.

Long-term job seekers

Refers to those persons who have been seeking work for one year or more.

Mother

A female parent with dependants and/or children, or non-dependant children. The relationship between a mother and a child/dependant can be formed via a natural, adoptive, step, foster or child dependency relationship.

Non-dependent Child

Non-dependent children are defined as children over the age of 15 years who are not studying full-time.

In order to be classified as a child, the person must have no partner or child of his/her own usually resident in the household. A separate family in the household is formed in this instance.

The types of parent-child relationships which can be formed are via a natural, adoptive, step, or foster relationship.

Dependency, as used in these classifications, refers to economic dependency and is only applied to the part of the population that can be described as 'children'.

The dependency criterion is based on the barriers to full time employment: age and student status. Essentially, once a child turns 15 years and becomes eligible to be included in the labour force, they lose their dependency status unless they are attending school or a tertiary educational institution full-time, are aged 15 to 24 years old and live in the same household as their parents/ guardian.

See Child.

Non-private Dwelling

An establishment which provides a communal type of accommodation, such as a hotel, motel, hospital or other institution. Family data is not collected from non-private dwellings.

Not determined

Where a person has an unknown labour force status, or were permanent members of the Australian defence force (out of scope for labour force survey).

One Parent family

A family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the family. This family type may or may not include other related individuals.

Opposite-sex Couple

Two persons of the opposite sex who are in a couple relationship and are usually resident in the same household.

Other Families

A family of related individuals residing in the same household. These individuals do not form a couple or parent-child relationship with any other person in the household and are not related to a couple or one parent family in the household.

If two brothers, for example, are living together and neither is a partner, a lone parent or a child to someone else in the household, and neither is related to any person in the household who is in a couple or one-parent family, then they are classified as an other family. However, if the two brothers share the household with the daughter of one of the brothers and her husband, then both brothers are attached to the couple family and classified as other related individuals.

Private Dwelling

A residential structure which is self-contained, owned or rented by the occupants, and intended solely for residential use. A private dwelling may be a flat, part of a house, or even a room, but can also be a house attached to, or rooms above shops or offices. Family data is only collected from private dwellings.

Relationship in Household

The relationship of each person to the family reference person, or where the person is not part of a family that person's relationship to the household reference person.

Same-sex Couple

Two persons of the same sex who are in a couple relationship and are usually resident in the same household.

Short-term job seekers

Refers to those persons who have been seeking work for less than 12 months.

Social Marital Status

Social marital status is the relationship status of an individual with reference to another person who is usually resident in the household. A marriage exists when two people live together as husband and wife, or partners, regardless of whether the marriage is formalised through registration. Individuals are, therefore, regarded as married if they are in a de facto marriage, or if they are living with the person to whom they are registered as married.

Tertiary Education Institution

A Technical and Further Education (TAFE) college, university, or other educational institution, excluding primary schools and secondary schools (i.e. High School).

Usual Resident

A person who usually lives in that particular dwelling and regards it as their own or main home.

Wife/Partner

A person in a couple relationship with another person usually resident in the same household. The couple relationship may be in either a registered or de facto marriage and includes same-sex couples.

Data Quality (Technical Note) (Technical Note)

INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of households, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all households had been included in the survey or a different sample was selected. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of households was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all households had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

$$\text{RSE\%} = (\text{SE/estimate}) \times 100$$

3 RSEs for Labour Force Status and Other Characteristics of Families estimates have been calculated using the Jackknife method of variance estimation. This process involves the calculation of 30 'replicate' estimates based on 30 different sub-samples of the original sample. The variability of estimates obtained from these sub-samples is used to estimate the sample variability surrounding the main estimate.

4 The Excel spreadsheets in the Downloads tab contain all the tables produced for this release and the calculated RSEs for each of the estimates. The RSEs for estimates have been calculated using the Jackknife method.

5 In the tables in this publication, only estimates (numbers, percentages and means) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included. Estimates with an RSE in the range 25% to 50% should be used with caution while estimates with RSEs greater than 50% are considered too unreliable for general use. All cells in the Excel spreadsheets with RSEs greater than 25% contain a comment indicating the size of the RSE. These cells can be identified by a red indicator in the corner of the cell. The comment appears when the mouse pointer hovers over the cell.

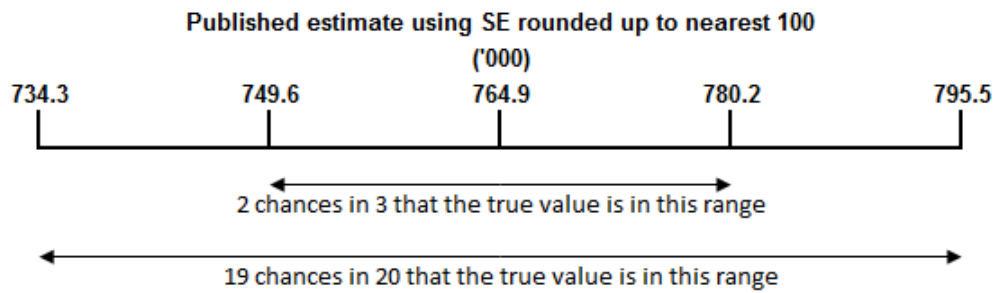
CALCULATION OF STANDARD ERROR

6 RSEs are routinely presented as the measure of sampling error in this publication and related products. SEs can be calculated using the estimates and the corresponding RSEs.

7 An example of the calculation of the SE from an RSE follows. **Datacube 3** shows that the estimated number of one parent families with a single wife/partner was 764,900 in June 2016, and the RSE for this estimate was 2.0%. The SE is:

$$\begin{aligned} \text{SE of estimate} &= (\text{RSE} / 100) \times \text{estimate} \\ &= 0.020 \times 764,900 \\ &= 15,300 \text{ (rounded to the nearest 100)} \end{aligned}$$

8 Therefore, there are about two chances in three that the value that would have been produced if all households had been included in the survey would fall within the range 749,600 to 780,200 and about 19 chances in 20 that the value would fall within the range 734,300 to 795,500. This example is illustrated in the following diagram.



PROPORTIONS AND PERCENTAGES

9 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSEs of proportions not provided in the spreadsheets is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

10 Considering **Datacube 3**, of the 764,900 one parent families with a single wife/partner, 384,700 or (50.3) were employed. The RSE of 384,700 is 3.4% and the RSE for 764,900 is 2.0%. Applying the above formula, the RSE for the proportion of persons who were employed:

$$RSE = \sqrt{(3.4)^2 - (2.0)^2} = 2.7$$

11 Therefore, the SE for the proportion of single wife/partners who were employed was 1.4 percentage points (= (50.3/100) x 2.7). Therefore, there are about two chances in three that the proportion of one parent families with a single wife/partner who were employed is between 48.9% and 51.7%, and 19 chances in 20 that the proportion was within the range 47.5% to 53.1%.

SUMS OR DIFFERENCES BETWEEN ESTIMATES

12 Published estimates may also be used to calculate the sum of two or more estimates, or the difference between two survey estimates (of numbers, means or percentages) where these are not provided in the spreadsheets. Such estimates are also subject to sampling error.

13 The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

14 The sampling error of the sum of two estimates is calculated in a similar way. An approximate SE of the sum of two estimates (x+y) may be calculated by the following formula:

$$SE(x + y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

15 Considering the example in paragraph 7, the estimated number of one parent families with a single wife/parent was 764,900, and the SE for this estimate was 15,300. From **Datacube 3**, the estimate of single mothers who were unemployed was 50,300 and the SE was 5,300. The estimate of single mothers who were unemployed:

$$764,900 + 50,300 = 815,200$$

16 The SE of the estimate of persons who were unemployed is:

$$SE = \sqrt{(15,300)^2 + (5,300)^2} = 16,200$$

17 Therefore, there are about two chances in three that the value that would have been produced if all households had been included in the survey would fall within the range 799,000 to 831,400 and about 19 chances in 20 that the value would fall within the range 782,800 to 847,600.

18 While these formulae will only be exact for sums of, or differences between, separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all sums or differences likely to be of interest in this publication.

SIGNIFICANCE TESTING

19 A statistical test for any comparisons between estimates can be performed to determine whether it is likely that there is a significant difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 9. This standard error is then used to calculate the following test statistic:

$$\frac{x - y}{SE(x - y)}$$

20 If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a difference between the populations with respect to that characteristic.

21 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY

INSTITUTIONAL ENVIRONMENT

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

This collection presents information about the labour force status and other characteristics of families. The information is based on data collected in the national monthly Labour Force Survey (LFS).

TIMELINESS

The Labour Force Status and Other Characteristics of Families is based on data collected from the June Labour Force Survey each year.

ACCURACY

The Labour Force Survey is based on a sample of private dwellings (approximately 26,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.32% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Annual family estimates are produced from the data collected in the June Labour Force Survey, but do not include people interviewed in non-private dwellings and those who were visitors to private dwellings. Those included in the estimates covered 84% of the survey sample for 2016.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three (66%) that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about 19 chances in 20 (95%) that the difference will be less than two standard errors.

Standard errors are discussed further in Technical Note - Data Quality. The standard error of annual family estimates may be calculated by using the spreadsheet contained in Labour Force Survey Standard Errors, Data Cube, Feb 2014 (cat. no. 6298.0.55.001).

COHERENCE

The ABS has been producing the Labour Force Status and Other Characteristics of Families since November 1974. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

From October 2008, the method of producing family estimates from the Labour Force Survey was improved to include the following:

- an expanded scope to include households containing permanent members of the Australian defence forces that are usually excluded from labour force estimates;
- an increased range of families in the LFS sample contributing to the family estimates; and
- improvements to the weighting method by utilising independent population benchmarks (of persons and households), ensuring the estimates more closely reflect the Australian population.

The Labour Force Survey and Labour Force, Australia: Labour Force Status and Other Characteristics of Families (Cat. No. 6224.0.55.001) estimates are calculated in such a way as to sum to the independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are updated quarterly based on Estimated Resident Population (ERP) data. Generally, revisions are made to population benchmarks for the LFS following the final rebasing of population estimates to the latest five-yearly Census of Population and Housing, or when the need arises. For all years in this release, estimates have been compiled using population benchmarks based on the results of the 2011 Census. These benchmarks have been revised to include the ERP data as at May 2016.

Changes to the LFS population benchmarks impact primarily on the magnitude of the Labour Force Survey estimates (i.e. employment and unemployment) that are directly related to the underlying size of the population. For more details on population benchmarks, see the Explanatory Notes in Labour Force, Australia (cat. no. 6202.0).

INTERPRETABILITY

The Labour Force Status and Other Characteristics of Families release contains a summary of findings (Australian Families, Couple Families, One Parent Families, Jobless Families, and Dependants aged 15 to 24 years) to aid interpretation of the results of the survey. Explanatory notes, a technical note, a glossary and an explanation of the terms 'family' and 'dependant' (in What is a Family?) are also included to further aid in the interpretation of the results. Details of the methodology and concepts used are also provided in a separate Information Paper: Improvements to Family Estimates from the Labour Force Survey, 2008 (cat. no. 6224.0.55.002).

DATA ACCESS

The main products from this collection are an Excel spreadsheet summary (available in downloads) that are released electronically via the ABS website. Additional data may be available on request.

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or via email to client.services@abs.gov.au.

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